

**What is claimed is:**

- 1        1. A method of dispatching an IP datagram comprising socks traffic on a socks server, in  
2        an Internet Protocol (IP) network comprising a plurality of socks servers, said IP datagram  
3        comprising an IP header comprising a Type Of Service (TOS) field, said method  
4        comprising the steps of:  
  
5        in a socks dispatcher:
  - 6            • retrieving the value of a Type Of Service (TOS) field from the IP header of the IP  
7            datagram; and
  - 8            • selecting a socks server \ referring to a first table \, said first table defining for each  
9            value of the TOS field one or a plurality of socks servers.  
  
1        2. The method according to claim1 wherein said IP datagram is sent by an IP network  
2        device with a given priority, and wherein said step of retrieving the value of the Type Of  
3        Service (TOS) field is followed by the further step of:  
  
4        in the socks dispatcher:
  - 5            • determining the priority of the IP datagram by referring to a second table, said second  
6            table defining a priority for each value of the Type Of Service (TOS) field.  
  
1        3. The method according to claim 2 wherein said IP datagram comprises data according

2 to a given application level protocol, said step of determining the priority of the IP datagram  
3 comprising the further step of:

4 • determining the application level protocol of data transported in said IP datagram by  
5 referring to said second table , said second table defining a priority and an application  
6 level protocol for each value of the Type Of Service (TOS) field .

1 4. The method according to claims 1 or 2 wherein in case of congestion in one or a plurality  
2 of output queues, said step of determining the priority of the IP datagram is followed by the  
3 further steps of:

4 • discarding in said one or plurality of output queues IP datagrams having the lowest  
5 priority until there is no more congestion, and  
6 • discarding the IP datagram when said IP datagram compared with IP datagrams in  
7 said one or plurality of output queues, has the lowest priority.

1 5. The method according to claims 1 or 2 wherein said first table comprises for each socks  
2 server :

3 • an identifier , preferably an address,  
4 • one or a plurality of TOS field values ,  
5 • optionally, a socks server capacity ,  
6 • optionally, application level protocols supported by the socks server.

1       6. The method according to claim 2 comprising the initial steps of:

2       • configuring said first and second tables,

3       • defining a default socks server for values of the Type Of Service (TOS) field not defined

4       in the first table, and

5       • defining a default priority and optionally a default application level protocol for values

6       of the Type Of Service (TOS) field not defined in the second table.

1       7. The method according to claims 1 or 2 wherein the step of selecting a socks server

2       referring to a first table, said first table defining for each value of the Type Of Service (TOS)

3       field one or a plurality of socks servers, comprises the further steps of:

4       • determining the number of socks servers defined for the value of the Type Of Service

5       (TOS) field retrieved from the IP datagram:

6           • if only one socks server is defined in the first table, forwarding the IP datagram

7           to said socks server, and

8           • if more than one socks server is defined in the first table, forwarding the IP

9           datagram to a socks server selected according to its capacity and the priority of the

10          IP datagram.

11

1       8. A socks dispatcher comprising:

2           an ip network comprising a plurality of socks servers, and

3           an IP datagram comprising an IP header, said IP header comprising a Type of Service

4           (TOS) field wherein said socks dispatcher

5 retrieves a value of said TOS field from the IP header of the IP datagram, and  
6 selects a socks server referring to a first table, said first table defining for each value  
7 of the TOS field, one or a plurality of socks servers.

1 9. A dispatcher according to claim 8 further comprising an IP network device wherein said  
2 IP datagram is sent by said IP network device with a given priority, and wherein said  
3 retrieving step is followed by a step of:

4 determining the priority of the IP datagram by referring to a second table, said second  
5 table defining a priority for each value of the Type of Service (TOS) field.

10. A computer program product having computer readable program code for dispatching  
an IP datagram comprising socks traffic on a socks server, in an Internet Protocol (IP)  
network comprising a plurality of socks servers, said IP datagram comprising an IP header  
comprising a Type Of Service (TOS) field, said computer readable program code  
comprising the steps of:

in a socks dispatcher:

• computer readable program code means for retrieving the value of a Type Of Service  
(TOS) field from the IP header of the IP datagram; and

• computer readable program code means for selecting a socks server referring to a first  
table, said first table defining for each value of the TOS field one or a plurality of socks  
servers.

1        11. The computer program product according to claim 10 wherein said IP datagram is sent  
2        by an IP network device with a given priority, and wherein said step of retrieving the value  
3        of the Type Of Service (TOS) field is followed by the further step of:

4        in the socks dispatcher:

5            • computer readable program code means for determining the priority of the IP datagram  
6        by referring to a second table, said second table defining a priority for each value of the  
7        Type Of Service (TOS) field.